

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

Claim 1 (canceled).

2. (currently amended) A recording medium for storing a program that causes an information processing apparatus to manage publicity availability of a decryption key used for decrypting information encrypted with an encryption key corresponding to said decryption key when executed, said program comprising:

codes that manage a expiration disclosure time of secrecy of said decryption key in a key storage, said key storage storing at least one decryption key for decrypting encrypted information; and

codes that disclose said decryption key with expired secrecy out of a key storage, said key storage storing said at least one decryption key for decrypting information
codes that make said decryption key available to another apparatus on and after the disclosure time to permit said another apparatus to decrypt the information which has been encrypted with said encryption key corresponding to said decryption key before the disclosure time.

3. (currently amended) A The recording medium for storing a program according to claim 2, wherein said codes that disclose said make said decryption key available allow disclose asaid decryption key resulting from searching a key managing table to be accessed from said another apparatus, said key managing

table indicating a relation between said decryption key stored in said key storage and
expiration disclosure time of secrecy of said decryption key.

4. (currently amended) A The recording medium for storing a program according to claim 3, wherein said search is performed based provided time information.

5. (currently amended) A recording medium for storing a program that causes an information processing apparatus to provide an encryption key used for encrypting information when executed, said program comprising:

codes that manage an encryption key ~~for encrypting information and a~~
~~expiration disclosure time which indicates when a decryption key of secrecy~~
~~correspondent corresponding to said encryption key becomes available;~~

~~code codes~~ that receive a request of an encryption key with a designated ~~expiration disclosure time from another apparatus~~~~of secrecy~~; and

codes that output an encryption key which corresponds ~~correspondent~~ to said the requested~~designated~~ expiration disclosure ~~time of secrecy~~ to said another apparatus out of a key storage storing said at least one encryption key for encrypting information, thereby enabling said another apparatus to encrypt information using the output encryption key that said information can be decrypted after the designated disclosure time.

6. (currently amended) A The recording medium for storing a program according to claim 5, said program further comprising:

codes that search a key managing table stored in the key managing table storage for an encryption key that which corresponds corresponds to said requested disclosure time for encrypting information, said key managing table indicating a relation between said encryption keys stored in the key storage and disclosure expiration times of secrecy of said decryption keys corresponding to the encryption keys; and

codes that output an encryption key resulting from said search.

7. (currently amended) A The recording medium for storing a program according to claim 5, said program further comprising:

codes that generate, if said key managing table does not store a key which corresponds correspondent to said requested time, an encryption key meeting a requested condition; and

codes that add said generated encryption key into said key managing table.

8. (currently amended) A recording medium for storing a program that causes an information processing apparatus to output a decryption key used for decrypting information encrypted data with an encryption key that corresponds to said decryption key and has been made available to encrypt the information when executed, said program comprising:

codes that acquire a current time; and

codes that output said decryption key with having a preset disclosure time before the current time expired secrecy to another apparatus based on referring to said current time.

9. (currently amended) A The recording medium for storing a program according to claim 8, said program further comprising:

codes that compare a disclosure disclosing-time of a decryption key in a key managing table in a key storage and said current time, said key managing table storing at least one set including of said decryption key and a disclosure disclosing time indicating when secrecy of said decryption key becomes available expires; and

codes that acquire said decryption key with having a preset disclosure time indicating when said decryption key becomes available before the current time secrecy expired, if the current time is on or after said disclosure disclosing-time as the a result of said comparing said current time with said disclosure disclosing time.

10. (currently amended) A The recording medium for storing a program according to claim 9, said program further comprising:

codes that extract said time information from encrypted data information.

11. (currently amended) A recording medium for storing a program that causes an information processing apparatus to manage availability of a decryption key used for decrypting encrypted information, said program comprising:

codes that generate a set of including an encryption key for encrypting information and a decryption key for decrypting the encrypted information; codes that receive time information inputted for making setting a disclosure time secrecy of said encryption
the decryption key expire for decrypting the encrypted information which has been encrypted before the disclosure time; and codes that list said the set of anincluding said encryption key and a decryption keykeys with said time information in a key managing table.

12. (currently amended) A The recording medium for storing program according to claim 11, wherein said time information includes start time, end time and time interval; said, and

wherein said program further comprising:
codes that make a new expiration disclosure time by adding a time interval to a current expiration disclosure time of the listed keys;, and codes that repeat said the codes that generates said the set of including encryption and decryption keys and said codes that make said new expiration disclosure time.

13. (currently amended) A service system for disclosing information to the public, said service system comprising:

an information transmitter that distributes encrypted information with time limited secrecy; and

a key controller that makes discloses a decryption key available on and after said time limited secrecy expires, the decryption key corresponding correspondent to an the encryption key having been used for encrypting said distributed information on or after said time limited secrecy expires.

14. (currently amended)A recording medium for storing a program that causes an information processing apparatus to provide time-limited secrecy to information to disclose information to the public when executed, said program comprising:

codes that receive time information indicating when secrecy of data-the information to be encrypted expires;

codes that transmit said time information to another apparatus that executes an encryption key service program; and

codes that receive an encryption key from said the another apparatus that executes the encryption key service program, said encryption key corresponds corresponding to said transmitted time information and provides the time-limited secrecy to the information.

15. (currently amended)A The recording medium for storing program according to claim 14, said program further comprising:

codes that encrypt said data to be encrypted information by using said received encryption key to provide the time-limited secrecy to the information.

16. (currently amended)A recording medium for storing program that causes an information processing apparatus to provide time-limited secrecy to information, disclose information to the public when executed, said program comprising:

codes that receive ~~data to be encrypted~~ the information and time information indicating when secrecy of said ~~data to be encrypted~~ information expires; and

codes that encrypt said ~~data to be encrypted~~ information by using an encryption key correspondent which corresponds to said time information and provides the time-limited secrecy to the information.

17. (currently amended)A-The recording medium for storing program according to claim 16, said program further comprising:

codes that pack said encrypted data-information and said time information into a file.

18. (currently amended)A recording medium for storing a program that causes an information processing apparatus to manage secrecy of encrypted information~~disclose information to the public when executed,~~ said program comprising:

codes that judge determine if secrecy of ~~an~~ the encrypted data-information expires; and

~~codes that acquire a disclosed description key from another apparatus for
said encrypted data with expired secrecy period to decrypt the information that has
been encrypted before expiration of the secrecy.~~

19. (currently amended) A-The recording medium for storing program according to claim 18, wherein said codes that ~~judge determine~~ comprises:
- codes that acquire time information out of a file including said encrypted ~~data information, and~~ said time information indicating when secrecy of said encrypted ~~data information expires; and~~
- codes that compare a current time with said time information to check if the ~~secrecy of the encrypted information has expired.~~

20. (currently amended) A-The recording medium for storing program according to claim 19, further comprising:
- codes that decrypt said encrypted ~~data information~~ with expired secrecy by using ~~said an~~ acquired decryption key.